SEQUENCE LISTING

<110>   Ayalon, Michal
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        Diber, Alex
        Levine, Zurit
        Nemzer, Sergey
        Dahary, Dvir
        Sorek, Rotem
        Levanon, Erez
        Rotman, Galit
        Savitsky, Kineret
        Chermesh, Chen
        Mintz, Liat
        Freilich, Shiri
        Beck, Nili
        Zhu, Wei-Yong
        Wasserman, Alon
        Azar, Idit
        Bernstein, Jeanne

<120>   NOVEL POLYNUCLEOTIDES ENCODING SOLUBLE POLYPEPTIDES AND METHODS USING SAME

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<170>   PatentIn version 3.2

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Thr Leu Val Gln Arg Ser Asn Gly Glu Cys Lys Glu Ala Leu Ala Lys
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Ser Glu Met Asn Val Asn Met Lys Tyr Gln Leu Pro Asn Phe Thr Ala
        35   40   45

Glu Thr Pro Ile Gln Asn Val Ile Leu His Glu His His Ile Phe Leu
    50   55   60

Gly Ala Thr Asn Tyr Ile Tyr Val Leu Asn Glu Glu Asp Leu Gln Lys
65   70   75   80

Val Ala Glu Tyr Lys Thr Gly Pro Val Leu Glu His Pro Asp Cys Phe
                85   90   95

Pro Cys Gln Asp Cys Ser Ser Lys Ala Asn Leu Ser Gly Gly Val Trp
            100   105   110

Lys Asp Asn Ile Asn Met Ala Leu Val Val Asp Thr Tyr Tyr Asp Asp
            115   120   125

Gln Leu Ile Ser Cys Gly Ser Val Asn Arg Gly Thr Cys Gln Arg His
    130   135   140

Val Phe Pro His Asn His Thr Ala Asp Ile Gln Ser Glu Val His Cys
145   150   155   160

Ile Phe Ser Pro Gln Ile Glu Glu Pro Ser Gln Cys Pro Asp Cys Val
          165   170   175

Val Ser Ala Leu Gly Ala Lys Val Leu Ser Ser Val Lys Asp Arg Phe
          180   185   190

Ile Asn Phe Phe Val Gly Asn Thr Ile Asn Ser Ser Tyr Phe Pro Asp
          195   200   205

His Pro Leu His Ser Ile Ser Val Arg Arg Leu Lys Glu Thr Lys Asp
    210   215   220

Gly Phe Met Phe Leu Thr Asp Gln Ser Tyr Ile Asp Val Leu Pro Glu
225   230   235   240

Phe Arg Asp Ser Tyr Pro Ile Lys Tyr Val His Ala Phe Glu Ser Asn
          245   250   255

Asn Phe Ile Tyr Phe Leu Thr Val Gln Arg Glu Thr Leu Asp Ala Gln
          260   265   270

Thr Phe His Thr Arg Ile Ile Arg Phe Cys Ser Ile Asn Ser Gly Leu
          275   280   285

His Ser Tyr Met Glu Met Pro Leu Glu Cys Ile Leu Thr Glu Lys Arg
    290   295   300

Lys Lys Arg Ser Thr Lys Lys Glu Val Phe Asn Ile Leu Gln Ala Ala
305   310   315   320

Tyr Val Ser Lys Pro Gly Ala Gln Leu Ala Arg Gln Ile Gly Ala Ser
          325   330   335

Leu Asn Asp Asp Ile Leu Phe Gly Val Phe Ala Gln Ser Lys Pro Asp
          340   345   350

Ser Ala Glu Pro Met Asp Arg Ser Ala Met Cys Ala Phe Pro Ile Lys
          355   360   365

Tyr Val Asn Asp Phe Phe Asn Lys Ile Val Asn Lys Asn Asn Val Arg
          370   375   380

Cys Leu Gln His Phe Tyr Gly Pro Asn His Glu His Cys Phe Asn Arg

385   390   395   400

Thr Leu Leu Arg Asn Ser Ser Gly Cys Glu Ala Arg Arg Asp Glu Tyr
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Arg Thr Glu Phe Thr Thr Ala Leu Gln Arg Val Asp Leu Phe Met Gly
            420   425   430

Gln Phe Ser Glu Val Leu Leu Thr Ser Ile Ser Thr Phe Ile Lys Gly
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Asp Leu Thr Ile Ala Asn Leu Gly Thr Ser Glu Gly Arg Phe Met Gln
    450   455   460

Val Val Val Ser Arg Ser Gly Pro Ser Thr Pro His Val Asn Phe Leu
465   470   475   480

Leu Asp Ser His Pro Val Ser Pro Glu Val Ile Val Glu His Thr Leu
            485   490   495

Asn Gln Asn Gly Tyr Thr Leu Val Ile Thr Gly Lys Lys Ile Thr Lys
            500   505   510

Ile Pro Leu Asn Gly Leu Gly Cys Arg His Phe Gln Ser Cys Ser Gln
        515   520   525

Cys Leu Ser Ala Pro Pro Phe Val Gln Cys Gly Trp Cys His Asp Lys
    530   535   540

Cys Val Arg Ser Glu Glu Cys Leu Ser Gly Thr Trp Thr Gln Gln Ile
545   550   555   560

Cys Leu Pro Ala Ile Tyr Lys Val Phe Pro Asn Ser Ala Pro Leu Glu
            565   570   575

Gly Gly Thr Arg Leu Thr Ile Cys Gly Trp Asp Phe Gly Phe Arg Arg
            580   585   590

Asn Asn Lys Phe Asp Leu Lys Lys Thr Arg Val Leu Leu Gly Asn Glu
        595   600   605

Ser Cys Thr Leu Thr Leu Ser Glu Ser Thr Met Asn Thr Leu Lys Cys
    610   615   620

Thr Val Gly Pro Ala Met Asn Lys His Phe Asn Met Ser Ile Ile Ile
625   630   635   640

Ser Asn Gly His Gly Thr Thr Gln Tyr Ser Thr Phe Ser Tyr Val Asp
            645   650   655

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Pro Val Ile Thr Ser Ile Ser Pro Lys Tyr Gly Pro Met Ala Gly Gly
            660             665             670

Thr Leu Leu Thr Leu Thr Gly Asn Tyr Leu Asn Ser Gly Asn Ser Arg
            675             680             685

His Ile Ser Ile Gly Gly Lys Thr Cys Thr Leu Lys Ser Val Ser Asn
    690             695             700

Ser Ile Leu Glu Cys Tyr Thr Pro Ala Gln Thr Ile Ser Thr Glu Phe
705             710             715             720

Ala Val Lys Leu Lys Ile Asp Leu Ala Asn Arg Glu Thr Ser Ile Phe
            725             730             735

Ser Tyr Arg Glu Asp Pro Ile Val Tyr Glu Ile His Pro Thr Lys Ser
            740             745             750

Phe Ile Ser Gly Gly Ser Thr Ile Thr Gly Val Gly Lys Asn Leu Asn
            755             760             765

Ser Val Ser Val Pro Arg Met Val Ile Asn Val His Glu Ala Gly Arg
    770             775             780

Asn Phe Thr Val Ala Cys Gln His Arg Ser Asn Ser Glu Ile Ile Cys
785             790             795             800

Cys Thr Thr Pro Ser Leu Gln Gln Leu Asn Leu Gln Leu Pro Leu Lys
            805             810             815

Thr Lys Ala Phe Phe Met Leu Asp Gly Ile Leu Ser Lys Tyr Phe Asp
            820             825             830

Leu Ile Tyr Val His Asn Pro Val Phe Lys Pro Phe Glu Lys Pro Val
            835             840             845

Met Ile Ser Met Gly Asn Glu Asn Val Leu Glu Ile Lys Gly Asn Asp
    850             855             860

Ile Asp Pro Glu Ala Val Lys Gly Glu Val Leu Lys Val Gly Asn Lys
865             870             875             880

Ser Cys Glu Asn Ile His Leu His Ser Glu Ala Val Leu Cys Thr Val
            885             890             895

Pro Asn Asp Leu Leu Lys Leu Asn Ser Glu Leu Asn Ile Glu Val Gly
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Phe Leu His Ser Ser His Asp Val Asn Lys Glu Ala Ser Val Ile Met
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<213>   Homo sapiens

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Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln Pro Leu Thr
        35   40   45

Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu Asp Gly Ile
        50   55   60

Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met Cys Glu Ser
65   70   75   80

Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro Lys Met Ala
            85   90   95

Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu Thr Cys Leu
            100   105   110

Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr Leu Glu Tyr
            115   120   125

Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg Ala Val Gln
        130   135   140

Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys Val Gly Val
145   150   155   160

Ser Ser Phe Pro Gln Leu Gly Val Gly Glu Asp Arg Leu Lys Asp Ser
                165   170   175

Val Leu Asp Asn Ser Gly Met Gln Cys His Phe Gln Lys Arg Arg Leu
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His Val Asn Lys Arg Val
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<212> PRT
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Arg Arg Leu His Val Asn Lys Arg Val
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gcttgaccca ataagaaatt cttgggtgcc gacgcggaag cagattcaga gcctagagcc     240

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agaacgaatt gacaaacaaa ttcggtacat cctcgacggc atctcagccc tgagaaagga     660

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gaacagattt gagagtagtg aggaacaagc cagagctgtg cagatgagta caaaagtcct     900

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ctctc                                                                   185
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<212>   PRT
<213>   Homo sapiens

<400>   9

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Leu Val Leu Leu Pro Val Ala Ser Ser Asp Cys Asp Ile Glu Gly Lys
            20                  25                  30


Asp Gly Lys Gln Tyr Glu Ser Val Leu Met Val Ser Ile Asp Gln Leu
        35                  40                  45


Leu Asp Ser Met Lys Glu Ile Gly Ser Asn Cys Leu Asn Asn Glu Phe
    50                  55                  60


Asn Phe Phe Lys Arg His Ile Cys Asp Ala Asn Lys Glu Gly Met Phe
65                  70                  75                  80


Leu Phe Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ser
                85                  90                  95


Thr Gly Asp Phe Asp Leu His Leu Leu Lys Val Ser Glu Gly Thr Thr
            100                 105                 110


Ile Leu Leu Asn Cys Thr Gly Gln Val Lys Gly Arg Lys Pro Ala Ala
            115                 120                 125


Leu Gly Glu Ala Gln Pro Thr Lys Ser Leu Ser Ser Gly Leu Gln Lys
    130                 135                 140


Gln Phe Thr Phe Tyr Arg Ser Asn Gly Arg His Thr His Ser Phe His
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Cys Lys Leu Ser Phe Leu His
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<212>   PRT
<213>   Homo sapiens

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<212> PRT
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            20   25   30

Asp Gly Lys Gln Tyr Glu Ser Val Leu Met Val Ser Ile Asp Gln Leu
        35   40   45

Leu Asp Ser Met Lys Glu Ile Gly Ser Asn Cys Leu Asn Asn Glu Phe
    50   55   60

Asn Phe Phe Lys Arg His Ile Cys Asp Ala Asn Lys Glu Gly Met Phe
65   70   75   80

Leu Phe Arg Ala Ala Arg Lys Leu Arg Gln Phe Leu Lys Met Asn Ser
                85   90   95

Thr Gly Asp Phe Asp Leu His Leu Leu Lys Val Ser Glu Gly Thr Thr
            100   105   110

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Ile Leu Leu Asn Cys Thr Gly Gln Val Lys Gly Arg Lys Pro Ala Ala
        115                 120                 125


Leu Gly Glu Ala Gln Pro Thr Lys Ser Leu Val Glu Leu Ile Ile Pro
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Ser Cys Met Pro Pro Leu Leu Ser Ser Thr Ser Asn Ser
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<210> 14
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<212> PRT
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<213> Homo sapiens

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caaagattga acctgcagac caagcgcaaa gtagaaactg aaagtacact gctggcggat   660

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<213> Homo sapiens

<400> 16

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<210> 17
<211> 153
<212> PRT
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Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Pro Cys Ser Asn Cys Pro
            20                  25                  30


Ala Gly Thr Phe Cys Asp Asn Asn Arg Asn Gln Ile Cys Ser Pro Cys
        35                  40                  45


Pro Pro Asn Ser Phe Ser Ser Ala Gly Gly Gln Arg Thr Cys Asp Ile
    50                  55                  60


Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu Cys Ser Ser
65                  70                  75                  80


Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His Cys Leu Gly
                85                  90                  95


Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
            100                 105                 110
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Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
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Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Ile Arg Val Ala Asp Glu
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Trp Asn His Asp Ser Gln Glu Lys Tyr
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<210>  18
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<213>  Homo sapiens

<400>  18

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aacatcagag tggctgacga atggaatcat gattcacaag aaaagtattg actattttct   600

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<213> Homo sapiens

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<210>   21
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<212>   PRT
<213>   Homo sapiens

<400>   21

Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val
1   5   10   15

Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro
            20   25   30

Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met
        35   40   45

Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu
    50   55   60

Val Phe Leu Leu Ser Glu Ala His Thr Cys Ile Pro Glu Asn Asn Gly
65   70   75   80

Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala
            85   90   95

Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys
            100   105   110

Gly Ser Phe Lys Pro Ser Glu His Val Leu Pro Pro Leu Lys Arg Ser
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Trp Ser Gln
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<400>   22

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1   5   10

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Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met
        35   40   45

Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu
        50   55   60

Val Phe Leu Leu Ser Glu Ala His Thr Cys Ile Pro Glu Asn Asn Gly
65   70   75   80

Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala
            85   90   95

Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys
            100   105   110

Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn
        115   120   125

Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser
    130   135   140

Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala
145   150   155   160

Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn
            165   170   175

Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys
        180   185   190

Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr
    195   200   205

Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Cys
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Glu Tyr Gln Glu Ala
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<213>    Homo sapiens

<400>    26
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Cys Glu Tyr Gln Glu Ala

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<210>   29
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<212>   PRT
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<400>   29

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1   5   10   15

Trp Thr Arg Ile Ala Ser Thr Ile Pro Pro His Val Gln Lys Ser Val
            20   25   30

Asn Asn Asp Met Ile Val Thr Asp Asn Asn Gly Ala Val Lys Phe Pro
        35   40   45

Gln Leu Cys Lys Phe Cys Asp Val Arg Phe Ser Thr Cys Asp Asn Gln
    50   55   60

Lys Ser Cys Met Ser Asn Cys Ser Ile Thr Ser Ile Cys Glu Lys Pro
65   70   75   80

Gln Glu Val Cys Val Ala Val Trp Arg Lys Asn Asp Glu Asn Ile Thr
            85   90   95

Leu Glu Thr Val Cys His Asp Pro Lys Leu Pro Tyr His Asp Phe Ile
            100   105   110

Leu Glu Asp Ala Ala Ser Pro Lys Cys Ile Met Lys Glu Lys Lys Lys
        115   120   125

Pro Gly Glu Thr Phe Phe Met Cys Ser Cys Ser Ser Asp Glu Cys Asn
    130   135   140

Asp Asn Ile Ile Phe Ser Glu Gly Glu Phe Ser Ser Leu Lys Gly Val
145   150   155   160

Gly Pro Glu Ile Cys Ala Asn Phe Leu Tyr Pro Trp Ser Ala Val Ser
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1   5   10   15

Phe Leu Tyr Pro Trp Ser Ala Val Ser
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<213>   Homo sapiens

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Leu Asp Val Asp Ser Pro Ala Glu Tyr Ser Gly Pro Glu Gly Ser Tyr
        35   40   45

Phe Gly Phe Ala Val Asp Phe Phe Val Pro Ser Ala Ser Ser Arg Met
    50   55   60

Phe Leu Leu Val Gly Ala Pro Lys Ala Asn Thr Thr Gln Pro Gly Ile
65   70   75   80

Val Glu Gly Gly Gln Val Leu Lys Cys Asp Trp Ser Ser Thr Arg Arg
                85   90   95

Cys Gln Pro Ile Glu Phe Asp Ala Thr Gly Asn Arg Asp Tyr Ala Lys
            100   105   110

Asp Asp Pro Leu Glu Phe Lys Ser His Gln Trp Phe Gly Ala Ser Val
    115   120   125

Arg Ser Lys Gln Asp Lys Ile Leu Ala Cys Ala Pro Leu Tyr His Trp
    130   135   140

Arg Thr Glu Met Lys Gln Glu Arg Glu Pro Val Gly Thr Cys Phe Leu
145   150   155   160

Gln Asp Gly Thr Lys Thr Val Glu Tyr Ala Pro Cys Arg Ser Gln Asp
            165   170   175

Ile Asp Ala Asp Gly Gln Gly Phe Cys Gln Gly Gly Phe Ser Ile Asp
        180   185   190

Phe Thr Lys Ala Asp Arg Val Leu Leu Gly Gly Pro Gly Ser Phe Tyr
    195   200   205

Trp Gln Gly Gln Leu Ile Ser Asp Gln Val Ala Glu Ile Val Ser Lys
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Tyr Asp Pro Asn Val Tyr Ser Ile Lys Tyr Asn Asn Gln Leu Ala Thr
225   230   235   240

Arg Thr Ala Gln Ala Ile Phe Asp Asp Ser Tyr Leu Gly Tyr Ser Val
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Ala Val Gly Asp Phe Asn Gly Asp Gly Ile Asp Asp Phe Val Ser Gly
        260   265   270

Val Pro Arg Ala Ala Arg Thr Leu Gly Met Val Tyr Ile Tyr Asp Gly
    275   280   285

Lys Asn Met Ser Ser Leu Tyr Asn Phe Thr Gly Glu Gln Met Ala Ala
    290   295   300

Tyr Phe Gly Phe Ser Val Ala Ala Thr Asp Ile Asn Gly Asp Asp Tyr
305   310   315   320

Ala Asp Val Phe Ile Gly Ala Pro Leu Phe Met Asp Arg Gly Ser Asp
        325   330   335

Gly Lys Leu Gln Glu Val Gly Gln Val Ser Val Ser Leu Gln Arg Ala
        340   345   350

Ser Gly Asp Phe Gln Thr Thr Lys Leu Asn Gly Phe Glu Val Phe Ala
        355   360   365

Arg Phe Gly Ser Ala Ile Ala Pro Leu Gly Asp Leu Asp Gln Asp Gly

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            370                        375                        380


Phe Asn Asp Ile Ala Ile Ala Ala Pro Tyr Gly Gly Glu Asp Lys Lys
385                 390             395                 400


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Pro Ser Gln Ile Leu Glu Gly Gln Trp Ala Ala Arg Ser Met Pro Pro
                420                 425                 430


Ser Phe Gly Tyr Ser Met Lys Gly Ala Thr Asp Ile Asp Lys Asn Gly
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Tyr Pro Asp Leu Ile Val Gly Ala Phe Gly Val Asp Arg Ala Ile Leu
                450                 455                 460


Tyr Arg Ala Arg Pro Val Ile Thr Val Asn Ala Gly Leu Glu Val Tyr
465                 470                 475                 480


Pro Ser Ile Leu Asn Gln Asp Asn Lys Thr Cys Ser Leu Pro Gly Thr
                485                 490                 495


Ala Leu Lys Val Ser Cys Phe Asn Val Arg Phe Cys Leu Lys Ala Asp
                500                 505                 510


Gly Lys Gly Val Leu Pro Arg Lys Leu Asn Phe Gln Val Glu Leu Leu
                515                 520                 525


Leu Asp Lys Leu Lys Gln Lys Gly Ala Ile Arg Arg Ala Leu Phe Leu
                530                 535                 540


Tyr Ser Arg Ser Pro Ser His Ser Lys Asn Met Thr Ile Ser Arg Gly
545                 550                 555                 560


Gly Leu Met Gln Cys Glu Glu Leu Ile Ala Tyr Leu Arg Asp Glu Ser
                565                 570                 575


Glu Phe Arg Asp Lys Leu Thr Pro Ile Thr Ile Phe Met Glu Tyr Arg
                580                 585                 590


Leu Asp Tyr Arg Thr Ala Ala Asp Thr Thr Gly Leu Gln Pro Ile Leu
                595                 600                 605


Asn Gln Phe Thr Pro Ala Asn Ile Ser Arg Gln Ala His Ile Leu Leu
                610                 615                 620


Asp Cys Gly Glu Asp Asn Val Cys Lys Pro Lys Leu Glu Val Ser Val
625                 630                 635                 640
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Asp Ser Asp Gln Lys Lys Ile Tyr Ile Gly Asp Asp Asn Pro Leu Thr
            645   650   655

Leu Ile Val Lys Ala Gln Asn Gln Gly Glu Gly Ala Tyr Glu Ala Glu
            660   665   670

Leu Ile Val Ser Ile Pro Leu Gln Ala Asp Phe Ile Gly Val Val Arg
            675   680   685

Asn Asn Glu Ala Leu Ala Arg Leu Ser Cys Ala Phe Lys Thr Glu Asn
    690   695   700

Gln Thr Arg Gln Val Val Cys Asp Leu Gly Asn Pro Met Lys Ala Gly
705   710   715   720

Thr Gln Leu Leu Ala Gly Leu Arg Phe Ser Val His Gln Gln Ser Glu
            725   730   735

Met Asp Thr Ser Val Lys Phe Asp Leu Gln Ile Gln Ser Ser Asn Leu
            740   745   750

Phe Asp Lys Val Ser Pro Val Val Ser His Lys Val Asp Leu Ala Val
            755   760   765

Leu Ala Ala Val Glu Ile Arg Gly Val Ser Ser Pro Asp His Ile Phe
    770   775   780

Leu Pro Ile Pro Asn Trp Glu His Lys Glu Asn Pro Glu Thr Glu Glu
785   790   795   800

Asp Val Gly Pro Val Val Gln His Ile Tyr Glu Val Cys Ser Cys
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<213>   Homo sapiens

<400>   34

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tccccgcccc cgcccccacg cctcctcagg tgctcagcct gaggccttcg tccaggagcg   180

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cccagcctca gacgctgcgt ggagcggcgg agccggaggg aagcaaagga ccgtctgcgc   480

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ccctcttgcc tgccccggag ctgtcccggg ctagccgaga agagagcggc cggcaagttt   600

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<213>    Homo sapiens

<400>    37

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Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn Ser Val
            20              25              30


Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe Ala Lys Gly
            35              40              45


Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg Ile Phe Gln Asp
    50              55              60


Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp Phe Ser Ser Leu Ser
65              70              75              80


Lys Tyr Gly Asp His Thr Leu Arg Val Arg Ala Glu Phe Ala Asp Glu
            85              90              95


His Ser Asp Trp Val Asn Ile Thr Phe Cys Pro Val Asp Asp Thr Ile
            100             105             110


Ile Gly Pro Pro Gly Met Gln Val Glu Val Leu Ala Asp Ser Leu His
            115             120             125


Met Arg Phe Leu Ala Pro Lys Ile Glu Asn Glu Tyr Glu Thr Trp Thr
    130             135             140


Met Lys Asn Val Tyr Asn Ser Trp Thr Tyr Asn Val Gln Tyr Trp Lys
145             150             155             160


Asn Gly Thr Asp Glu Lys Phe Gln Ile Thr Pro Gln Tyr Asp Phe Glu
            165             170             175


Val Leu Arg Asn Leu Glu Pro Trp Thr Thr Tyr Cys Val Gln Val Arg
            180             185             190


Gly Phe Leu Pro Asp Arg Asn Lys Ala Gly Glu Trp Ser Glu Pro Val
    195             200             205


Cys Glu Gln Thr Thr His Asp Val Phe Gly Pro Ser Ser Ser
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<213> Homo sapiens

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Val Phe Gly Pro Ser Ser Ser
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<210> 39

<211> 1806
<212> DNA
<213> Homo sapiens

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<210> 41
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<213> Homo sapiens

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Pro Trp Val Leu Ser Ala Ala Ala Gly Gly Lys Asn Leu Lys Ser Pro
            20   25   30

Gln Lys Val Glu Val Asp Ile Ile Asp Asp Asn Phe Ile Leu Arg Trp
        35   40   45

Asn Arg Ser Asp Glu Ser Val Gly Asn Val Thr Phe Ser Phe Asp Tyr
    50   55   60

Gln Lys Thr Gly Met Asp Asn Trp Ile Lys Leu Ser Gly Cys Gln Asn
65   70   75   80

Ile Thr Ser Thr Lys Cys Asn Phe Ser Ser Leu Lys Leu Asn Val Tyr
                85   90   95

Glu Glu Ile Lys Leu Arg Ile Arg Ala Glu Lys Glu Asn Thr Ser Ser
            100   105   110

Trp Tyr Glu Val Asp Ser Phe Thr Pro Phe Arg Lys Ala Gln Ile Gly
            115   120   125

Pro Pro Glu Val His Leu Glu Ala Glu Asp Lys Ala Ile Val Ile His
        130   135   140

Ile Ser Pro Gly Thr Lys Asp Ser Val Met Trp Ala Leu Asp Gly Leu
145   150   155   160

Ser Phe Thr Tyr Ser Leu Val Ile Trp Lys Asn Ser Ser Gly Val Glu
                165   170   175

Glu Arg Ile Glu Asn Ile Tyr Ser Arg His Lys Ile Tyr Lys Leu Ser
                180   185   190

Pro Glu Thr Thr Tyr Cys Leu Lys Val Lys Ala Ala Leu Leu Thr Ser
     195   200   205

Trp Lys Ile Gly Val Tyr Ser Pro Val His Cys Ile Lys Thr Thr Val
     210   215   220

Glu Asn Glu Leu Pro Pro Pro Glu Asn Ile Glu Val Ser Val Gln Asn
225   230   235   240

Gln Asn Tyr Val Leu Lys Trp Asp Tyr Thr Tyr Ala Asn Met Thr Phe
          245   250   255

Gln Val Gln Trp Leu His Ala Phe Leu Lys Arg Asn Pro Gly Asn His
          260   265   270

Leu Tyr Lys Trp Lys Gln Ile Pro Asp Cys Glu Asn Val Lys Thr Thr
          275   280   285

Gln Cys Val Phe Pro Gln Asn Val Phe Gln Lys Gly Ile Tyr Leu Leu
          290   295   300

Arg Val Gln Ala Ser Asp Gly Asn Asn Thr Ser Phe Trp Ser Glu Glu
305   310   315   320

Ile Lys Phe Asp Thr Glu Ile Gln Ala Phe Leu Leu Pro Pro Val Phe
          325   330   335

Asn Ile Arg Ser Leu Ser Asp Ser Phe His Ile Tyr Ile Gly Ala Pro
          340   345   350

Lys Gln Ser Gly Asn Thr Pro Val Ile Gln Asp Tyr Pro Leu Ile Tyr
          355   360   365

Glu Ile Ile Phe Trp Glu Asn Thr Ser Asn Ala Glu Arg Lys Ile Ile
     370   375   380

Glu Lys Lys Thr Asp Val Thr Val Pro Asn Leu Lys Pro Leu Thr Val
385   390   395   400

Tyr Cys Val Lys Ala Arg Ala His Thr Met Asp Glu Lys Leu Asn Lys
          405   410   415

Ser Ser Val Phe Ser Asp Ala Val Cys Glu Lys Thr Lys Pro Gly Gln
          420   425   430

Asn Leu Leu Leu Ser Phe Leu Lys Met
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<213> Homo sapiens

<400> 42

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caaaagatag tgttatgtgg gctttggatg gtttaagctt tacatatagc ttagttatct   660

ggaaaaactc ttcaggtgta gaagaaagga ttgaaaatat ttattccaga cataaaattt   720

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ttctatactg ta   1512